

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

JUN 0 2 2008

REPLY TO THE ATTENTION OF:

(AE-17J)

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

Brian Schmidt, Facility Manager Perham Resource Recovery Facility 201 6th Avenue NE Perham, Minnesota 56573

Dear Mr. Schmidt:

Enclosed is an executed copy of an Administrative Order between Perham Resource Recovery Facility (Perham RRF), and the U.S. Environmental Protection Agency. In conjunction with a Consent Agreement and Final Order under negotiation, this Order resolves the March 23, 2007, Finding of Violation that was issued to Perham RRF. If you have any questions regarding the Order, please contact Charles Hall of my staff at (312) 353-3443.

Thank you for your cooperation.

Sincerely yours,

William L. MacDowell, Chief

Minnesota/Ohio Air Enforcement and Compliance Assurance Section

cc: Jeff T. Connell, Minnesota Pollution Control Agency

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:	)
Perham Resource Recovery Facility	) Administrative Consent Order
Perham, Minnesota	) ) EPA-5-08-113(a)-MN-1
Proceeding pursuant to Sections	)
113(a)(3) and 114(a)(1) of the	)
Clean Air Act, 42 U.S.C.	)
§§ 7413(a)(3) and 7414(a)(1)	)

## Administrative Consent Order

1. The Director of the Air and Radiation Division, United States Environmental Protection Agency, Region 5, is issuing this Order to the Perham Resource Recovery Facility (Perham RRF) under Sections 113(a)(3) and 114(a)(1) of the Clean Air Act (Act), 42 U.S.C. §§ 7413(a)(3) and 7414(a)(1).

## Statutory and Regulatory Background

- 2. Pursuant to Sections 111 and 129 of the Act, the Administrator promulgated the Federal Plan Requirements for Small Municipal Waste Combustion (MWC) Units Constructed On or Before August 30, 1999, 40 C.F.R. 62, Subpart JJJ (hereinafter, the Small MWC FIP) at 40 C.F.R. §§ 62.15000 through 15410. The Small MWC FIP applies to municipal waste combustion units with the capacity to burn between 50 and 250 tons of municipal solid waste (MSW) per day. A Small Class II MWC Unit is located at a MWC plant with aggregate plant combustion capacity less than or equal to 250 tons per day of municipal solid waste.
- 3. Pursuant to 40 C.F.R. § 62.15160(a) and Table 4 of the Small MWC FIP, after the date the initial stack test and continuous emission monitoring system evaluation are required or completed (whichever is earlier), the owner or operator of a Small Class II MWC Unit must comply with the following emission standards for HCl: 250 parts per million by Volume, dry basis, at 7 percent oxygen (ppmV,d @ 7% O<sub>2</sub>).
- 4. Pursuant to Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), the Administrator of EPA may issue an order requiring compliance to any person who has violated or is violating the Small MWC FIP. The Administrator has delegated this authority to the Director of the Air and Radiation Division.

5. Pursuant to Section 114(a)(1) of the Act, 42 U.S.C. § 7414(a)(1), the Administrator of EPA may require any person who owns or operates an emission source to keep records on air pollution control equipment parameters when direct monitoring of emissions is impractical. The Administrator has delegated this authority to the Director of the Air and Radiation Division.

#### Findings

- 6. The Perham RRF owns and operates a Small Class II MWC Unit at 201 6th Avenue, NE, Perham, Minnesota.
- 7. The Perham RRF has the capacity to combust approximately 114 tons of MSW per day. Therefore, the Perham RRF is subject to the Small MWC FIP at 40 C.F.R. § 62.15160(a) and Table 4 of the Small MWC FIP.
- 8. The Perham RRF owns or operates an "emission source" within the meaning of Section 114(a)(1) of the Act, 42 U.S.C. § 7414(a)(1). Therefore, the Perham RRF is subject to the requirements of Section 114(a)(1).
- 9. On March 23, 2007, EPA issued to the Perham RRF a Finding of Violation alleging that the Perham RRF violated the Small MWC FIP by discharging into the atmosphere gases that contained hydrogen chloride in excess of 250 ppmV, d @ 7% O<sub>2</sub>.
- 10. On May 7, 2007, representatives of the Perham RRF and EPA discussed the March 23, 2007, Finding of Violation.

#### Compliance Program

- 11. By the effective date of this Order, the Perham RRF must achieve, demonstrate, and maintain compliance with the Small MWC FIP at its Perham, Minnesota, facility.
- 12. During each HCl performance test, Perham RRF will determine the average lime feed rate in pounds per hour (lbs/hr), using the procedures provided in Paragraph 13 below.
- 13. Perham RRF will monitor the screw feed conveyor auger rotation speed (measured in revolutions per minute (RPM)) to monitor lime feed rate to the APC using the feed rate drop test described below. Perham RRF will perform the feed rate drop test on the redundant screw feed conveyer first. After completion, Perham RRF will place the redundant screw feed conveyer into service, and conduct the same drop test on the primary screw feed conveyer. Perham RRF will perform the feed rate drop test on a monthly basis.

Perham RRF will perform the lime feed drop test by feeding lime through the screw feed conveyor auger over a measured time interval at a fixed RPM and collecting the lime in a container. Perham RRF will perform a total of six tests (approximately 10 minutes each) over a consecutive 60 minute period. Perham RRF will use a different container to collect the lime for each 10-minute interval during the 60-minute period.

For each approximate 10-minute interval, Perham RRF will determine the amount of lime collected in the container by subtracting the tare weight of the empty container from the weight of the container including the lime collected. Perham RRF will determine the lime feedrate per Equation 1 below. Perham RRF will average the lime feed rate determined for each of the six 10-minute intervals per Equation 2 below. Perham RRF will correlate this average lime feed rate with the RPM during the drop test and use it for determining the lime feedrate, in pounds per hour (lbs/hr), at that screw feed conveyor auger rotation speed (measured in RPM).

Equation 1 LFR10 = LC / TL \* 60 min / hr

## Where:

LFR10 = lime feed rate for 10 minute test (lbs/hr)

LC = amount of lime collected (lbs)

TL = length of test (minutes)

## Equation 2

LFdt = average of LFR10 results per Equation 1 (lbs/hr)

Perham RRF will determine the lime feed rate for other screw feed conveyor auger rotation speeds per Equation 3 below:

#### Equation 3

LFnew = LFdt \* RMPnew / RPMdt

## Where:

LFnew = lime feed rate at new RPM rate (lbs/hr)
LFdt = lime feed rate during drop test (lbs/hr)

RPMnew = RPM at new RPM (RPM)

RPMdt = RPM during drop test (RPM)

Perham RRF will continuously monitor and record the screw feed conveyor auger rotation speed of each screw feed

conveyor by the CEM / Data Acquisition System using the 4-20 milliamps signal sent from the screw feed conveyor. Using the lime feed rate information obtained from the drop tests, Perham RRF's data acquisition system converts the screw feed conveyor auger rotation speed signal to a feed rate in pounds per hour that the CEM / Data Acquisition System records.

Perham RRF will visually inspect the lime feed system twice daily (once per 12-hour shift) to ensure proper lime delivery to the APC. Perham RRF will record inspections in the daily operating log.

During all periods when the MWC unit is operating and combusting waste, Perham RRF will calculate the 3-hour arithmetic block average lime feed rate in pounds per hour based on the screw feeder auger rotation speed. When calculating the 3-hour arithmetic block average, Perham RRF will:

- (1) Exclude hours when the MWC unit is not operating; and
- (2) Include hours when the MWC unit is operating but the lime feed system is not working correctly.

The 3-hour arithmetic block average periods will begin at 12 midnight. Each 3-hour arithmetic block average will be calculated from three consecutive 1-hour arithmetic averages. Each 1-hour arithmetic average will start at the beginning of the hour and ends at the beginning of the following hour. Each 1-hour arithmetic average will consist of at least 4 data points, equally spaced in time, if the MWC unit is operated the entire hour. If the MWC unit is operated less than 1 hour, the 1-hour arithmetic average will consist of 1 data point for every 15 minutes (or less) of operation.

- 14. Perham RRF must maintain a 3-hour block average lime feed rate at or above the highest average level established during the most recent HCl test.
- 15. Perham RRF will determine the total amount of lime used each calendar quarter per Equation 4 below.

$$\frac{\text{Equation 4}}{\text{LO = p + (ibq - ieq)}}$$

#### Where:

LQ = the total amount of lime used each calendar quarter

(lbs)

The total amount of lime used each calendar quarter calculated using Equation 4 will equal or exceed the required quarterly usage of lime during the same calendar quarter calculated using Equation 5.

## Equation 5 C = f \* h

## Where:

C = Required quarterly lime usage for the plant in pounds

f = Required lime feed rate for the MWC unit in pounds
 per hour. This is the average lime feed rate during
 the most recent HCl stack tests

- h = Number of hours the MWC unit was in operation during the calendar quarter (hours)
- 16. Perham RRF will keep records required to demonstrate compliance with this Administrative Order until this Administrative Order terminates:
  - (1) Average lime feed rate in pounds per hour during all stack tests for HCl emissions. Perham RRF will include supporting CEM / Data Acquisition System records;
  - (2) All 3-hour arithmetic block average lime feed rates in pounds per hour calculated from the monitored operating parameter;
  - (3) Total lime purchased and delivered to Perham RRF for each calendar quarter. Perham RRF will include supporting documentation; and
  - (4) Required quarterly usage of lime for Perham RRF, calculated using the equations in Paragraph 15. Perham RRF will include supporting calculations.
- 17. Each calendar quarter while this Administrative Order is in effect, the Perham RRF will report:
  - (1) The average lime feed rate recorded during the most recent HCl performance test;

- (2) The lowest 3-hour arithmetic block average lime feed rate recorded during the calendar quarter;
- (3) The total lime used each calendar quarter, using Equation 4; and
- (4) The required quarterly lime usage, using Equation 5.
- 18. The Perham RRF must send all reports required by this Order no later than 30 days after the end of each calendar quarter to:

Attention: Compliance Tracker (AE-17J)
Air Enforcement and Compliance Assurance Branch
EPA, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604.

#### General Provisions

- 19. This Order does not affect the Perham RRF's responsibility to comply with other local, state, and federal laws and regulations.
- 20. This Order does not restrict EPA's authority to enforce Section 112 of the Act, or any other section of the Act.
- 21. Nothing in this Order limits EPA's authority to seek appropriate relief, including penalties under Section 113 of the Act, 42 U.S.C. § 7413, for the Perham RRF's violation of the Small MWC FIP.
- 22. Failure to comply with this Order may subject the Perham RRF to penalties of up to \$32,500 per day for each violation under Section 113 of the Act, 42 U.S.C. § 7413, and 69 Fed. Reg. 7121 (Feb. 13, 2004) (amending 40 C.F.R. Part 19).
- 23. The terms of this Order are binding on the Perham RRF, its assignees and successors. The Perham RRF must give notice of this Order to any successors in interest, prior to transferring ownership, and must simultaneously verify to EPA, at the above address, that the Perham RRF has given the notice.
- 24. This Order is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 et seq., because it seeks collection of information by an agency from specific individuals or entities as part of an administrative action or investigation. To aid in our electronic record keeping

- efforts, please provide your response to this Order without staples. Paper clips, binder clips, and 3-ring binders are acceptable.
- 25. EPA may use any information submitted under this Order in an administrative, civil or criminal action.
- 26. The Perham RRF agrees to the terms of this Order.
- 27. This Order is effective on the date of signature by the Director of the Air and Radiation Division. This Order will terminate 1 year from the effective date, provided that the Perham RRF has complied with all terms of the Order throughout its duration.

7/30/08

Kevih Keil

Mayor of Perham, Minnesota

Date

hery 1/.) Newton, Acting Director

Air and Radiation Division

#### CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent the Administrative Consent Order, EPA Order No. EPA-5-08-113(a)-MN-1, by Certified Mail, Return Receipt Requested, to:

Brian Schmidt, Facility Manager Perham Resource Recovery Facility 201 6th Avenue NE Perham, Minnesota 56573

I also certify that I sent a copy of the Administrative Consent Order, EPA Order No. EPA-5-08-113(a)-MN-1, by First Class Mail to:

Jeff T. Connell, Manager Compliance and Enforcement Section Industrial Division Minnesota Pollution Control Agency 520 Lafayette Road St. Paul, MN 55155-4194

on the  $\frac{1}{2}$  day of  $\frac{1}{2}$  ONC. 2008

Loretta Shaffer

AECAS (MN-OH Section)

CERTIFIED MAIL RECEIPT NUMBER: 700103200005 8919 1556